

SERUM FOR HOG CHOLERA

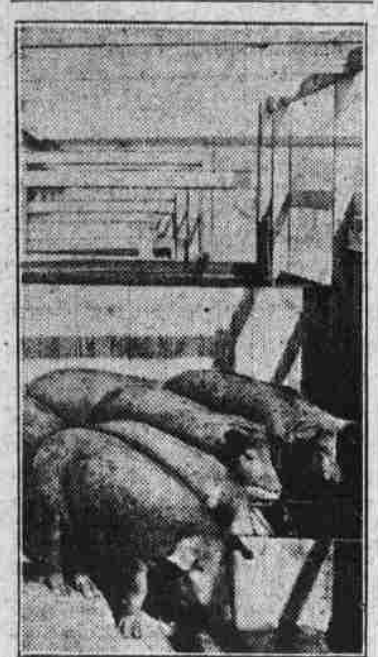
NOTWITHSTANDING THE GREAT GOOD IT HAS DONE, IT IS NOT THE ONLY MEASURE TO CONSIDER.

By J. W. Connaway, Professor of Veterinary Science, College of Agriculture, University of Missouri.

Notwithstanding the great good that serum has done in curing hog cholera, its importance is exaggerated. In fact, there are other and more important measures that should be used.

The prompt and intelligent use of quite simple measures of sanitation by a group of farmers whose farms adjoin will effectually rid the neighborhood of the disease. The sick hogs and the dead hogs are full of the germs. These will contaminate feed yards, fields, roadways, streams, wagons, railroad and stock yards. Dogs, pigeons and buzzards may carry the disease from an infected farm to other farms. But if the proper precautions are taken to isolate and destroy the infection these carriers that are somewhat difficult to control become harmless as distributors of the disease. The fact that we now have the serum to aid us does not lessen the importance of these simpler methods.

Isolate from the herd every sick hog on the first appearance of sickness. Do not wait until a diagnosis is



Quarantine Pens Should Have Poultry Netting Around Them.

made. Place the hog in a quarantine shed or pen covered with wire netting to keep out the chickens and birds. The infection will then be confined to a small space and will not reach the other animals. To destroy the germs of the disease the dead hogs should be burned; the law requires it. Use fresh air-slaked lime abundantly about the hog lots and sheds, rake up the litter and burn it or mix it thoroughly with lime. Disinfect the wagon wheels and horses' feet and shoes of the driver when hogs have been hauled to the shipping station. The stock yards, as a rule, are infected.

During an outbreak of cholera put valuable dogs in quarantine and destroy the worthless ones. Make war on pigeons, buzzards and crows. Hogs should not be given access to ponds or running streams. Fence the ponds and pipe out the water into a trough.

Keep the hogs free from lice and worms. A spray of crude oil will kill the lice. Santonin and calomel (six grains to each 100 pounds live weight) fed in slop, on an empty stomach, is useful in expelling worms. A mixture of sal soda, three pounds; copperas, three pounds; common salt, three pounds; sulphur, one pound; charcoal, four pounds, kept in a trough in a dry place is also a good worm preventive.

If the farmers of any neighborhood will follow the recommendations made, but little hog cholera serum will be required—and farmers have time and again kept their herds free from the disease by such measures.

However, when an outbreak of cholera does occur the farm adviser should be notified at once, if there is one in the county.

A balanced ration aids in keeping hogs in good health. When feeding in the dry lot corn can be balanced by feeding corn six parts and oil meal one part; or corn three parts and ship stuff one part; or corn 10 to 15 parts and tankage one part. Soybean or alfalfa hay is also excellent.

From the time the wheat, clover or alfalfa starts in the spring until the last pasturing goes in the fall, hogs should be kept out in the fields. Raze planted in rows will make pasture throughout the season, and it cannot be equalled as forage for hogs. Hogs should be kept on the plowed fields, rather than on permanent pastures. A good three-year rotation for hogs is: Corn and cowpeas; soy beans; rape.

Shade should be provided. When throwing out corn throw it in different places. Fill an old wagon with corn and haul it from place to place. Water should be supplied from barrels or tanks, hauled to different places in fields where the hogs are pasturing.

Told by the Eyes.

Greenish, hazel and spotted eyes are accompanied, usually, with shrewd, quick, nervous, restless temperaments. According to Professor Hudson, Asiatics with hazel eyes are cunning and weasel-like. Contrary to the popular notion, persons with green eyes are too indifferent in passion to be at all jealous of the opposite sex; they are, however, frequently envious of their own.

The bee is about the only insect that ever gained feminine namesakes. Deborah was a name given to the Hebrews for the bee, and owing to its popularity among the Puritans there is still to be found an occasional Deborah in the United States. Melissa, the Greek name for bee, is seldom found nowadays.

THE SPRAYING CALENDAR

WHAT MATERIAL TO USE AND THE BEST TIME TO USE IT.

By W. L. Howard, Professor of Horticulture, College of Agriculture, University of Missouri.

These directions cover the main points in spraying against the common insects and diseases of the apple, peach and cherry.

The Apple Tree.
FIRST SPRAYING: Just after the first clusters of leaves have opened, but before the blossoms themselves have unfolded, using either Bordeaux mixture (three pounds copper sulphate, three pounds lime, 50 gallons water) or commercial lime sulphur, 1½ gallons to 48½ gallons of water. This spraying is chiefly for the purpose of controlling the apple scab disease, which causes so many speckled, knotty apples.

SECOND SPRAYING: Immediately after the majority of the blossoms have fallen, using commercial lime sulphur, 1½ gallons to 48½ gallons of water. Before filling the barrel with water, add three pounds of arsenate of lead paste to poison the insects. Stir the paste thoroughly in a bucket of water before pouring into the sprayer, as otherwise it would sink to the bottom of the barrel in a lump. This spraying is to prevent the apple scab and is the all-important application for controlling the codling moth and curculio, the two worst insects of the apple.

THIRD SPRAYING: Two to three weeks after the blossoms fall, using either Bordeaux mixture or lime sulphur as directed under first application. Also add 2½ pounds of arsenate of lead paste. This spraying is for the purpose of poisoning the curculio and codling moth and preventing apple scab, apple blotch, black rot and other diseases.

In north Missouri three sprayings will usually be sufficient. In south Missouri, where there is danger of bitter rot, two or three additional sprayings will be necessary. The fourth application should be given six weeks after the blossoms fall, using Bordeaux mixture 4-4-50 or 5-5-50, and if there are signs of a late brood of codling moth add 2½ pounds of arsenate of lead. Other sprayings may be given at intervals of two weeks, using only Bordeaux mixture at the rate of 5-5-50. Lime sulphur is not reliable for preventing the bitter rot.

The Peach Tree.

FIRST SPRAYING: A few days after the blossoming period, when the calyx tube or "shuck" is just dropping off of the little peaches, spray with arsenate of lead paste two pounds, lime four pounds, water 50 gallons. (Slake the lime, mix the arsenate with water and pour in, then add water to make 50 gallons.)

SECOND SPRAYING: Three weeks after the first application, use arsenate of lead paste 1½ pounds, the Scott self-boiled lime sulphur 8-5-50. This kind of lime sulphur cannot be bought, so it must be made at home. Slake eight pounds of lime in a box or large vessel. When it begins to simmer from its own heat stir in eight pounds of fine sulphur. Stop the simmering or boiling at the end of eight or ten minutes by pouring on cold water. Strain the mixture into a barrel and add water to bring up to 50 gallons.

Peaches are sprayed in order to prevent the brown rot, which destroys the fruit at near ripening time. To aid in preventing the rot it is necessary to poison the curculio insect, which is responsible for spreading the disease.

Sometimes a third spraying will be necessary. This should be made one month before the fruit is ripe, with self-boiled lime sulphur 8-5-50. It is not necessary to add any poison. The commercial lime sulphur, even when greatly diluted, is not safe for spraying peaches, as it is liable to cause injury to both fruit and foliage.

The Cherry Tree.
FIRST SPRAYING: After the leaves have begun to come out, but before the blossoms open, using Bordeaux mixture 2-3-50 or some form of lime sulphur, either the commercial or self-boiled.

SECOND SPRAYING: As soon as the calyx tube is off of the young fruit use arsenate of lead paste two pounds, Bordeaux mixture 2-3-50 or self-boiled lime sulphur 7-7-50, or commercial lime sulphur 1½ gallons, with water enough to make up to 50 gallons of the solution.

These two sprayings are to control the leaf spot, powdery mildew and to poison the curculio insect, which punctures the fruit.

THIRD SPRAYING: Just after the fruit is off, using Bordeaux mixture 2-3-50, self-boiled lime sulphur 7-7-50, or commercial lime sulphur 1½ gallons to 48½ gallons of water. This is to make healthy foliage in order that good strong fruit buds may be formed for the next year's crop.

The agricultural experiment station at the college of agriculture, University of Missouri, Columbia, will be glad to advise anyone where to buy spraying materials, pumps and other equipment.

As soon as any community gets the idea that a boy is bad, why, the boy generally gets bad just to prove it, whether he has ever done wrong before or not. It is the easiest way to go; public opinion has greased the toboggan and the boy takes the downward trip with very little inconvenience or scruple.

The wife of a Chinese emperor made the first silk in 2600 B. C. In 350 Aristotle first mentions silk among the Greeks. In the twelfth century the manufacture of silk was carried on in Sicily, later spreading to Italy, Spain and the south of France. It was not manufactured in England before 1604.

To increase the oat yield use a pure seed of a variety adapted to your region; fan and grade the seed; treat the seed for smut; drill instead of broadcasting.

FIND A VERY CURIOUS KNIFE

Relic of Past Found When Stump of Apple Tree is Removed From Canton, Pa., Garden.

Philadelphia.—When the stump of an apple tree was removed from the garden belonging to E. W. Walborn, near Canton, Pa., directly under the stump and sticking straight down in the ground was found a curious knife. The blade, from shaft to point, is 11½ inches. It is 2½ inches wide at the hilt and tapers to a needle point. The back of the blade is thick and heavy and the edge has evidently been



Two Centuries Old.

ground down to a razor-like sharpness. Near the hilt are die-cut Roman letters "Sabatier Rue, France," and beneath this an open hand, surrounded by the letters "A Paris." The question at once arises: Who put the knife there, and when? The steel is of the finest. Not even its long immersion in the earth has eaten away the surface to any considerable extent. Perhaps some French "voyageur" camped there two hundred years ago, and forgot his knife. More likely some wandering Indian band camped there and left the knife that they had bought of the French, paying for it with beaver skins. One can surmise almost anything. The chances are that the owner left in a hurry, for knives like that, even today, are valuable, and some hundreds of years ago would have been worth its weight in gold. Certain it is that the English settlers did not carry French knives, and this particular blade dates back beyond the earliest English settlement.

HOUSE CAT IS NEARLY BAKED

The Family Pet Slept in Oven of Cook Stove and Is Nearly Burned to Death.

Waynesboro, Pa.—M. B. Ayers, Hamilton avenue, Waynesboro, almost cooked a new dish at his home.

When he retired at night he left the oven door of the kitchen stove open. To get away from the cold the family cat crawled into the oven and there curled itself up for a sleep that lasted all through the night.

When Mr. Ayers went downstairs in the morning to stir up the fire he closed the oven door. The cat slept on and made no protest. Then Mr. Ayers turned on the drafts and thrust the poker into the bed of coals, and in a short time he had a good fire going.

He heard the mewing of a cat, but he couldn't see a cat, and he fancied the animal might be on the outside. But the cat grew more persistent in its mewing and added a tone of anguish to it, and then Mr. Ayers, thought him of the oven. He opened the door and the cat sprang on to him, almost knocking him off his feet. The animal was burned terribly. Its feet were badly charred and its body was almost baked. It is still living and is on the road to recovery.

1,000 JOBLESS MEN IN RIOT

Told by April Fool Joke Company Would Hire Men, They Go There and Break in Doors.

Chicago.—One thousand clamoring men, misled by an "April fool" joke, stormed the new \$1,000,000 Soo line freight terminal at West Twelfth and Canal streets in quest of employment. Through heavy steel gates, the locks of which were broken by this onrush, the army surged. Until attacked by a phalanx of bluecoats, under the leadership of Lieutenant Kellher of the Maxwell street station, these men—part of the "army of unemployed"—were in control of the grounds of the terminal citadel. But the policemen soon drove them back, a quarrelling, cursing, disappointed throng.

It was fully an hour before the police succeeded in clearing the property of this host of men. The invaders refused to leave until driven back by the clubs of the bluecoats. "We want work! Give us a job!" were the cries of the men. As the crowd was driven from the railroad property it took up a new position directly across from the plaza of the terminal. None were arrested.

YOUNG CHILD GETS PIG'S EYE

Operation in Baltimore Hospital the First of Its Kind in United States.

Baltimore, Md.—What is believed to be the first operation of its kind in this country was performed at a local hospital when the cornea of a pig's eye was grafted on the eight-year-old eye of a three-month-old boy. It was said that previous operations, in which rabbits' eyes had been used, were unsuccessful, but that experiments with pigs' eyes had led scientists to believe that they were more adaptable. Two cases are said to be on record where the grafting of human cornea gave sight to totally blind eyes.

In the operation the pig was chloroformed, the eyeball taken out and the cornea cut from it. An extraordinarily fine needle and fine silk were used in sewing the cornea in place. The eye will remain bandaged for about a week.

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